X-1006-2C US PATENT

CLAIMS

1. A method for time multiplexing signals comprising: merging a set of nets carrying the signals into a shared interconnect portion;

altering a netlist based on the merging; and placing a design represented by the altered netlist.

2. A method of time multiplexing signals on interconnect in a programmable logic device, the method comprising:

merging the nets into a shared interconnect portion; altering the design based on the merging; placing the altered design; and routing the altered design.

3. An integrated circuit comprising:

a set of configurable logic blocks comprising multiple signal sources; and

a time multiplexing signal generator controlling which of the multiple signal sources provides its signal to a corresponding signal destination.

- 4. The integrated circuit of Claim 3, wherein the multiple signal sources are located in one configurable logic block.
- 5. The integrated circuit of Claim 3, wherein the multiple signal sources generate critical signals.
- 6. The integrated circuit of Claim 3, wherein the time multiplexing signal generator includes a counter.